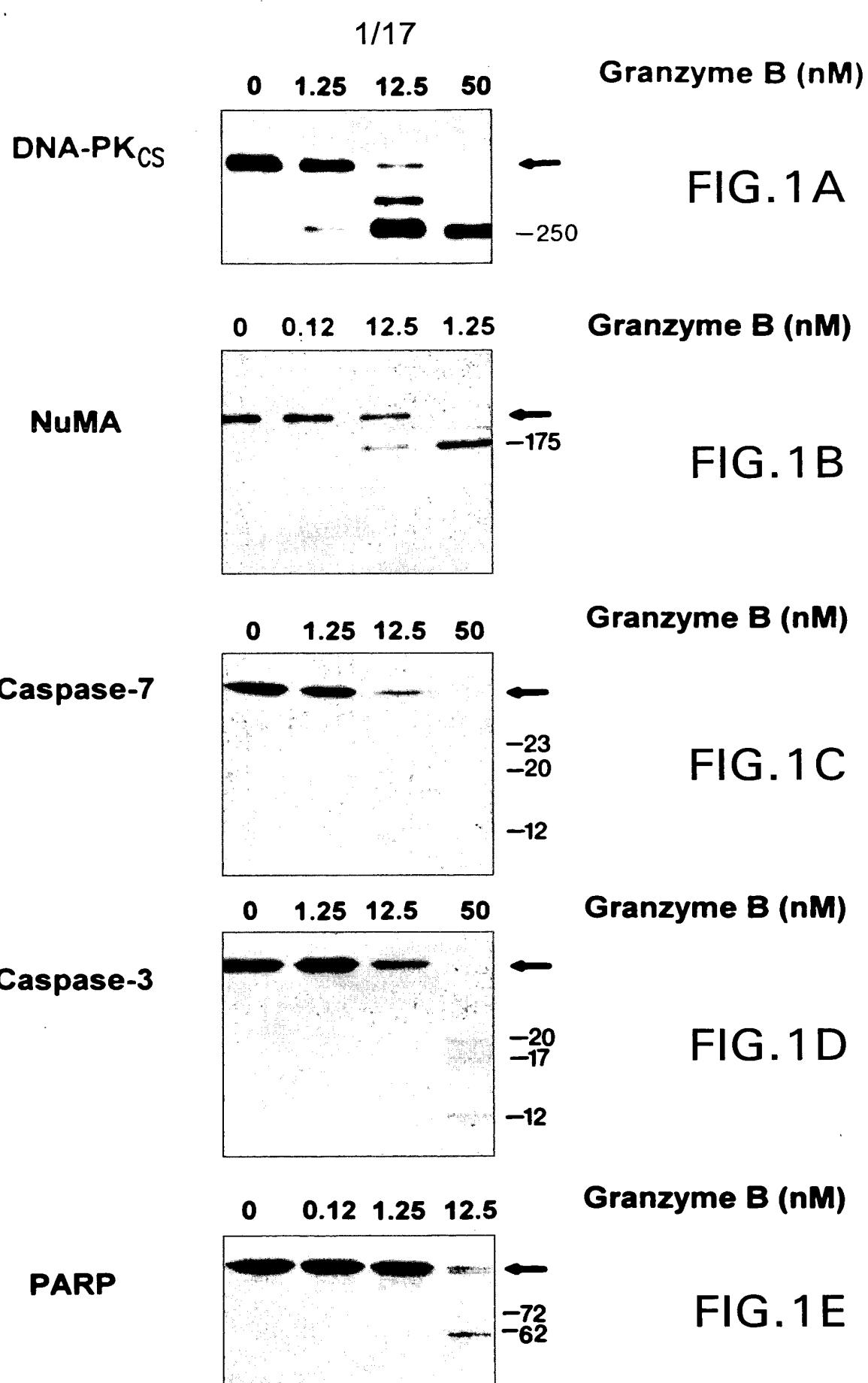




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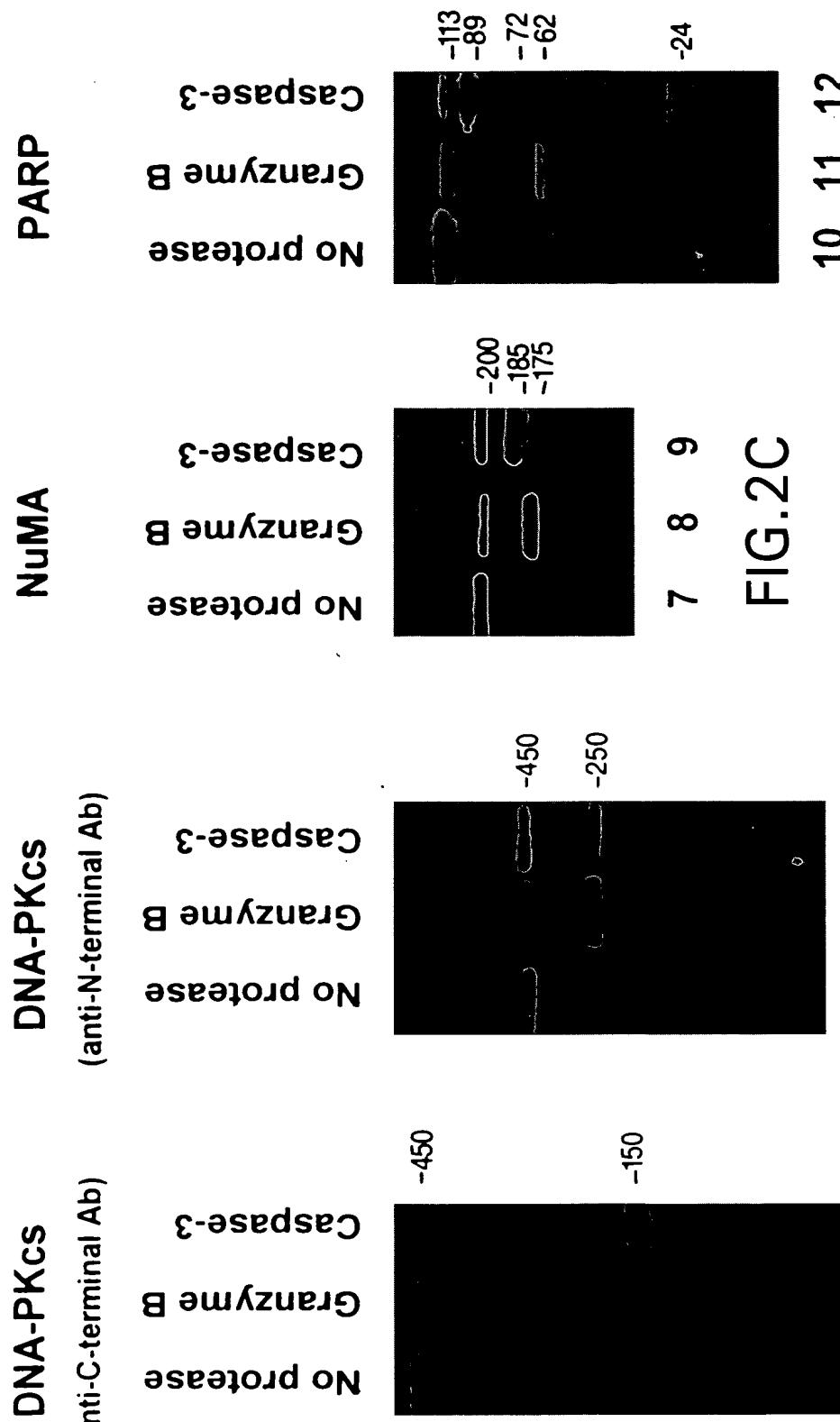


FIG.2A

FIG.2B

FIG.2D

FIG.2C

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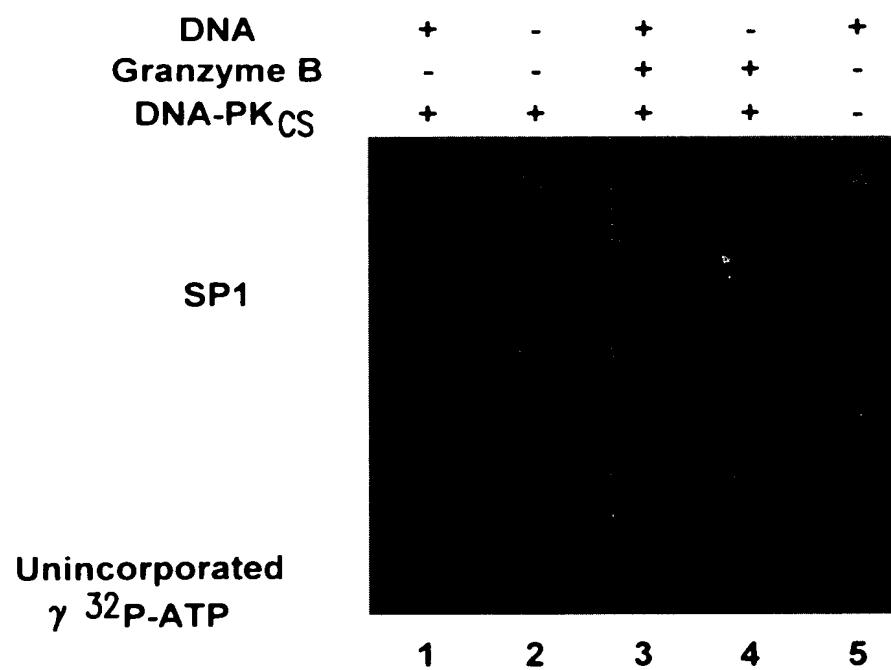


FIG.3

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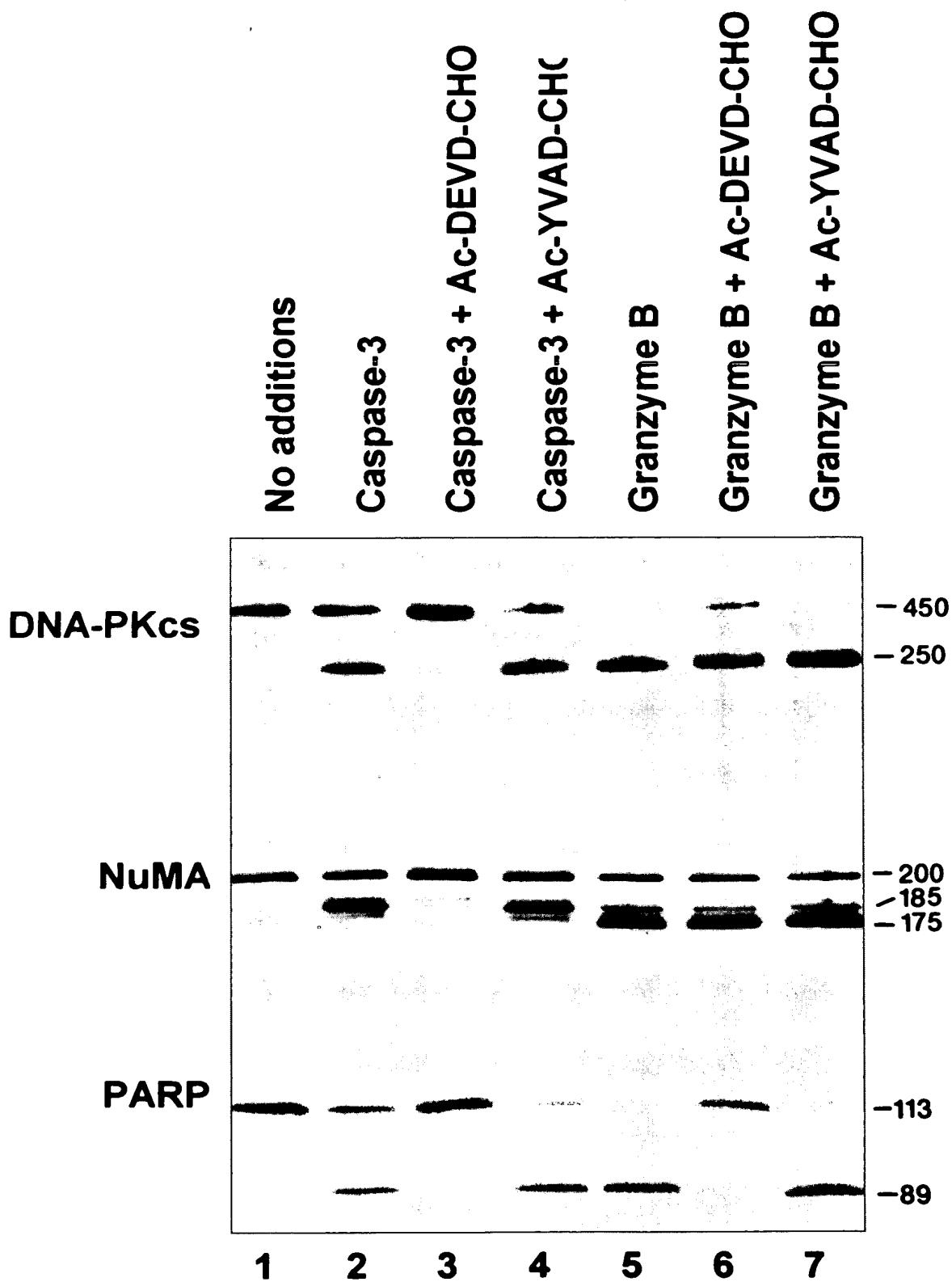


FIG. 4

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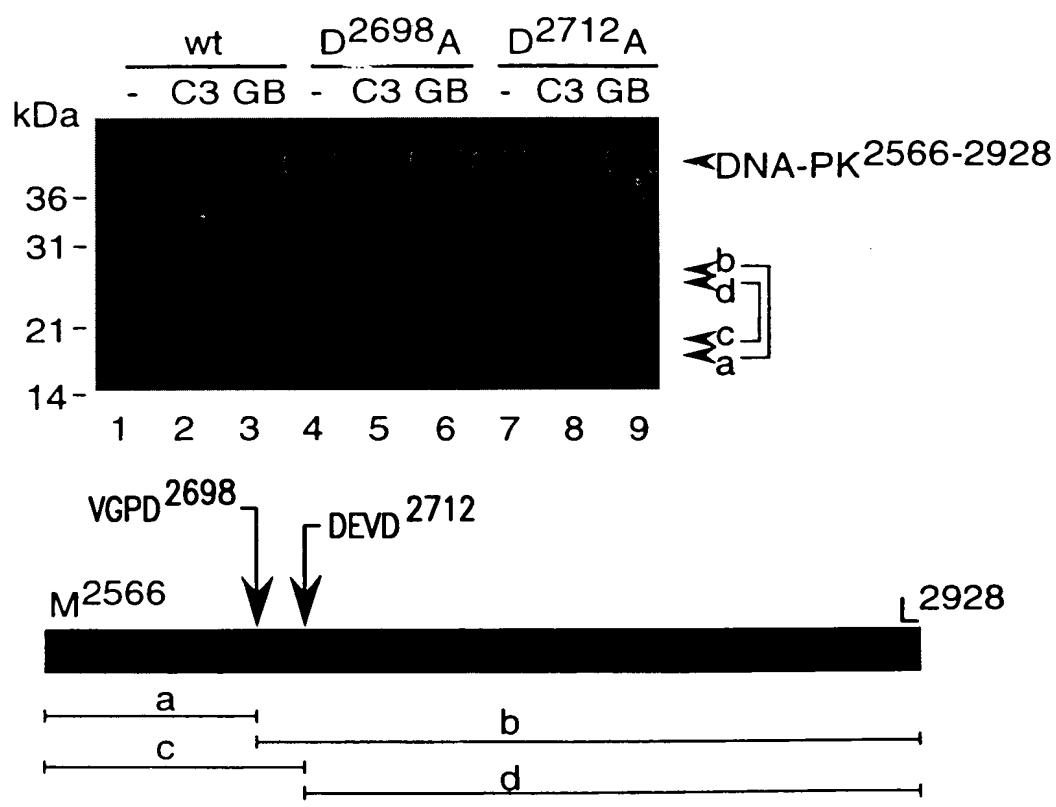


FIG. 5

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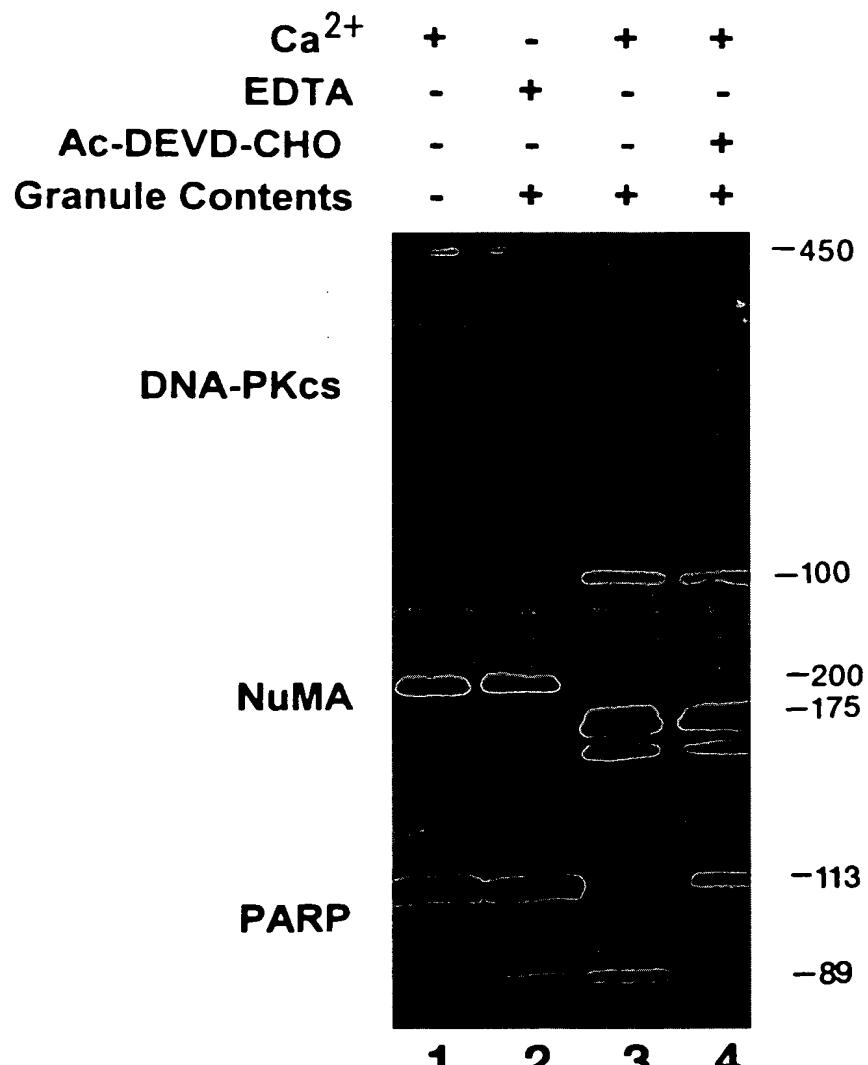


FIG. 6

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LAK	+	-	+	+
K562	-	+	+	+
DEVD	-	-	-	+

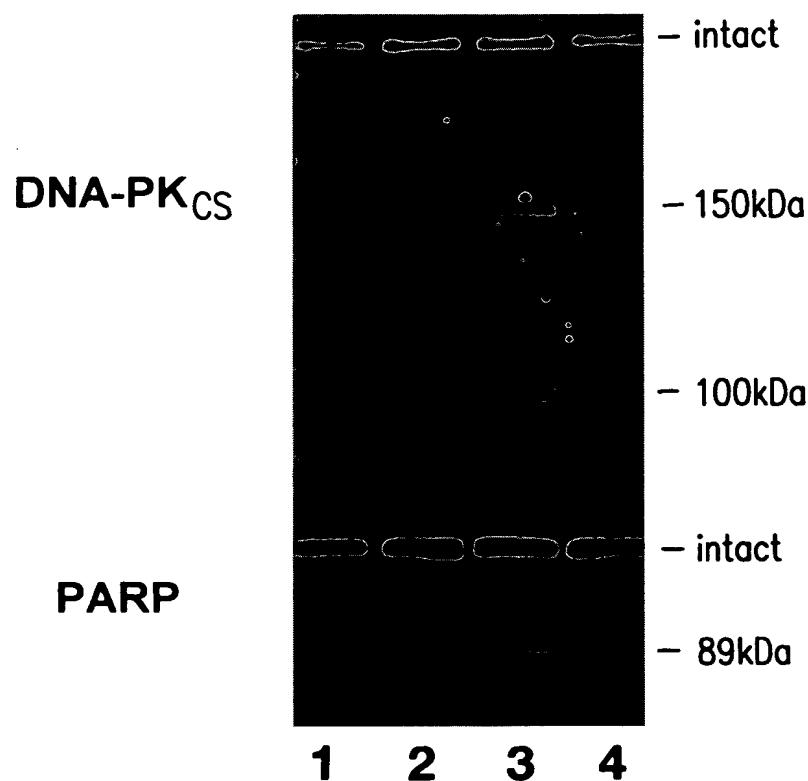


FIG. 7

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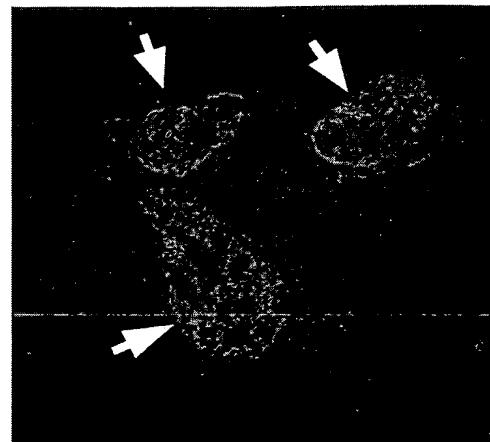


FIG. 8C



FIG. 8B



FIG. 8A

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REPLACEMENT SHEET

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LOCUS 284337 2101 aa 12-APR-1996
DEFINITION NuMA protein - human.
ACCESSION 284337
PID g284337
DBSOURCE PIR:locus A42184
summary: #length 2101 #molecular-weight 236296 #checksum 8715.
PIR dates: 31-Dec-1993 #sequence_revision 31-Dec-1993#text_change
12-Apr-1996.
KEYWORDS .
SOURCE human.
ORGANISM Homo sapiens
Eukaryotae; mitochondrial eukaryotes; Metazoa; Chordata;
Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
Homo.
REFERENCE 1 (residues 1 to 2101)
AUTHORS Compton,D.A., Szilak,I. and Cleveland,D.W.
TITLE Primary structure of NuMA, an intranuclear protein that defines a
novel pathway for segregation of proteins at mitosis
JOURNAL J. Cell Biol. 116 (6), 1395-1408 (1992)
MEDLINE 92176238
REFERENCE 2 (residues 1 to 2101)
AUTHORS Tang,T.K., Tang,C.J., Chen,Y.L. and Wu,C.W.
TITLE Nuclear proteins of the bovine esophageal epithelium.II. The NuMA
gene gives rise to multiple mRNAs and gene products reactive with
monoclonal antibody WI
JOURNAL J. Cell. Sci. 104 (Pt 2), 249-260 (1993)
MEDLINE 93280231
REFERENCE 3 (residues 1 to 2101)
AUTHORS Harborth,J., Weber,K. and Osborn,M.
TITLE Epitope mapping and direct visualization of the parallel,
in-register arrangement of the double-stranded coiled-coil in the
NuMA protein
JOURNAL EMBO J. 14 (11), 2447-2460 (1995)
MEDLINE 95300777
FEATURES Location/Qualifiers
source 1..2101
/organism="Homo sapiens"
/db_xref="taxon:9606"
Protein 1..2101
/product="NuMA protein"

FIG.9A



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REPLACEMENT SHEET

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1 mtlhatrgaa lswvnslhv adpveavlql qdcfikii drihgeeq qilkqpvser
61 ldfvcslflqk nrkhpspec lvsaqvleg selelakmtm llyhstmss ksprdweqfe
121 ykiqaelavi lkfvldhedg lnlnedlenf lqkapvpstc sstfpelisp pshqakreir
181 flelkvass ssgnnflsgs paspmgdilq tpqfqmrrlk kqladersnr delelelaen
241 rklltekdaq iamqqridr lallnekqao splepkelee lrdknesltm rlhetlkqcq
301 dlktksqmd rkinqlseen gdlsfkref ashlqqlqda lneltahsk atgewlekqa
361 qlekelsaal qdkkcleekn eilqgqlsql eehlsqlqdn ppqekgevlg dvlqletlkq
421 eaatlaannt qlgarvemle tergqceakl laerghfee kqqlssltd lqssisnlsq
481 akeeleqasq ahgarltaqv asltselttl natiqqddqe laglkqqake kqaqlaqtq
541 qqeasqqlr hqveqlsss kqkeqqlkev aekqeatrqd haqqlatsae ereaslreld
601 aalkkleale kekaakleil qqqlqvanea rdsaqtsvtq aqrekaelsr kveelqacve
661 tarqegheaq aqvaelelql rseqqkatek ervaqekdq qeqlqalkes lkvtkgslee
721 ekrraadale eqqrciselk aetrslvegh krerkeleee ragrkglear llqlgeahqa
781 etevlrlrela eamaaqhtae seceqlvkev aawrdgyeds qqeeaqygam fqeqlmtlke
841 ecekraqelq eakekvagie shselqisrq qnklaelhan laralqqvqe kevraqklad
901 dlistlqekma atskevarle tlvrkageqq etasrelvke paragdrqpe wleeqqgrqf
961 cstqaalqam ereaegmgne lerlraalme sqqqqqueerg qqerevarlt qergraqadl
1021 alekaarael emrlqnalne qrvefatlqe alahalteke gkdqelaklr glesaqikel
1081 eelrqtvkql keglakkeke hasgsgaqse aagrteptgp klealraevs kleqqcqqkqq
1141 eqadslersl eaerasraer dsaletlqqq leekaqelgh sqsalasaqr elaafrtkvq
1201 dhskaedewk aqvargrfea erknslissl eeevsiinrq vlekegeske lkrlvmaese
1261 ksqkleesca ccrqrqpatv pelqnaallc grrcrasgre aekgrvasen lrgeltsqae
1321 raeelgqelk awqekffqke qalstlqleh tstqalvsel lpakhlcqql qaeqaaaekr
1381 hreeleqskq aagglraeli raqrelgeli plrqkvaeqe rtaqqlraek asyaeqlsmi
1441 kkahgllaee nrglgeranl grqfleveld qarekyvqel aavradaetr laevqreaqs
1501 tarelevmta kyegakvkvl eerqrqfeer qkltaqveel skkladsdqa skvqqqklka
1561 vqagggesqq eagrfaqln elqaqlsqke qaashyklqm ekakthydak kqqnqelqeq
1621 lrsleqlqke nkelraeaer lghelqqagl ktkeaeqtcr httaqrsle aqvahadqql
1681 rdlgkfqvat dalksrepqa kpqlsids ldsceegtp lsitsklprt qpdgtspge
1741 paspisqrlp pkveslesly ftpiparsqa plessldslg dvfldsgrkt rsarrrttqi
1801 initmtkkld veepdsanss fystrsapas qaslratsst qslarlspd ygnallslp
1861 gyrrptrssa rrsqagvssg appgrnsfym gtcqdepegl ddwnriaelq qrnrvcpphl
1921 ktcplesrp sislgtitde emktgdqet lrrasmqpiq iaegtgittr qqrkrvslep
1981 hqgpgtipesk katscfprpm tprdrhegrk qstteaqkka apastkqadr rqsmeftlin
2041 tpkklnsll rrgaskkals kaspntrsgt rrspriatt asaataaaig atrakgkak
2101 h

FIG.9B



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REPLACEMENT SHEET

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LOCUS 107227 2115 aa10-NOV-1995

DEFINITION NuMA protein - human.

ACCESSION 107227

PID g107227

DBSOURCE PIR: locus S23647

summary: #length 2115 #molecular-weight 238273 #checksum 4391.

PIR dates: 19-Feb-1994 #sequence_revision 10-Nov-1995 #text_change 10-Nov-1995.

KEYWORDS

SOURCEhuman.

ORGANISM Homo sapiens

Eukaryotae; mitochondrial eukaryotes; Metazoa; Chordata;
Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
Homo.

REFERENCE 1 (residues 1 to 2115)

AUTHORS Yang,C.H., Lambie,E.J. and Snyder,M.

TITLE NuMA: an unusually long coiled-coil related protein in the
mammalian nucleus

JOURNAL J. Cell Biol. 116 (6), 1303-1317 (1992)

MEDLINE 92176231

FEATURES Location/Qualifiers

source 1..2115

/organism="Homo sapiens"

/db_xref="taxon:9606"

Protein 1..2115

/product="NuMA protein"

FIG.10A



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REPLACEMENT SHEET

12/17

1 mtlhatrgao lswvnsihv adpveavlql qdcslfikii drihgteeqq qilkqpvser
61 ldfvcslqk nrkhpspec lvsaqvleg selelakmtm llyhstmss ksprdweqfe
121 ykiqaelavi lkfvldhedg lnlnedlenf lqkapvpstc sstfpeelsp pshqakreir
181 flelkvass sagnnflsgs paspmgdilq tpqfqmrrlk kqladersnr delelelaen
241 rklitekdaq iammqqridr lallnekqaa splepkelee lrdknesltm rlhetlkqcq
301 dlktksqmd rkinglseen gdlsfkref ashllqqldq aineltehsk acqewlekqa
361 qlekelasaal qdkkcleekn eilqgklsql eehlsqlqdn ppqekgevlg dvlqletlkq
421 eaatlaannt qlqarvemle terggqeakl laerghfee kqqlssltd lqssisnlsq
481 akeeleqasq ahgaritaqv asltselttl natiqqqdqe laglkqqake kqaqlaqtlq
541 qeqeqasqqlr hqveqlsss kqkeqqlkev aekqeatrqd haqqlataae ereaslrend
601 aalkqleale kskaakleil qqqlqvanea rdsaqtsvtq aqrekaelsr kveelqacve
661 tarqeqheaq aqvaelelql rseqqkatek ervaqekdq qeqlqalkes lkvtkgslee
721 ekrraadale eqqrciselk aetrsiveqh krerkeleee ragrkglear lqqlgeahqa
781 etevlrela eamsaqhtae seceqlvkev awrerryeds qeqeqaqygam fqeqlmtlke
841 ecekarelq eakekvagie shselgisrq qnelaelhan laralqqvqe kevraqklad
901 dlstlqekma atskevarle tlvrkageqq etasrelvke paragdrqpe wleeqqgrqf
961 cstgaalgam ereaeqmgne lerlraalme sqqqqqeerg qqerevarlt qergraqadl
1021 alekaarael emrlqnalne qrvefatlqe alahalteke gkdqelaklr gleaaqikel
1081 eelrqtvkql keqlakkoke hasgsgaqse aagrteptgp klealraevs kleqqcqkqq
1141 eqadslersl eaerasraer dsaletlqqq leekaqelgh sqsalasaqr elaftrkvq
1201 dhskaedewk aqvargrfea erknslissl eeevsiinrq vlekegeske lkrlvmaese
1261 ksqkleerlr lqaetasns araaerssal reevqslree aekqrvasen lrqeltsqae
1321 raeelqelk awqekffqke qalstlqleh tstqalvsel lpakhlcqql qaeqaaadekr
1381 hreelegskq aagglraell raqrelgeli plrpkvaeqe rtaqqlraek asyaeqlsmi
1441 kkahgllaee nrglgeranl grqfleveld qarekyvqel aavradaetr laevqreaqs
1501 tarelevmta kyegakvkv1 eerqrqfeer qkltaqveql evfqrqeqtkq veelskklad
1561 sdqaskvqqq klkavqaqgg esqqaqrlq aqlnelqaql sqkeqasehy klqmekakth
1621 ydakkqnnqe lqeqlrsloq lkkenkelra eaerlghelq qaglktkae qtcrlitaqv
1681 rsleaqvaha dqqlrdlgkf qvatdalksr epqakpqldi sidsldlsce egtplsitsk
1741 lprtpdgtv vpgepaspis qrppkvesl eslyftpipa rsqaplessl dslgdvfqds
1801 grktrsarrt ttqiinitmt kkldveepds anssfystrs apasqaslr tsstqslarl
1861 gspdygnal ls1pgyrptt rssarrsqag vssgapppgrn sfymgtcqde peqlddwnri
1921 aelqqrnrvp pphlktcypl esrpstslgt itdeemktgd pqtirrasm qpiqiaegtg
1981 ittrqqrkry slephqgpgt peskkatscf prpmtpdrh egrkqsttea qkkaapastk
2041 qadrrgsmaf silntpkklg nsllrrgask kalskaspt rsgtrrspri atttasaata
2101 aaigatprak gkakh

FIG.10B

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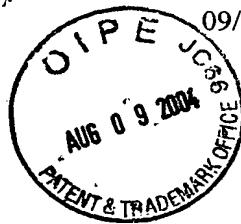
LOCUS 1362789 4096 aa 06-SEP-1996
 DEFINITION DNA-activated protein kinase, catalytic subunit - human.
 ACCESSION 1362789
 PID g1362789
 DBSOURCE PIR:locus A57099
 summary: #length 4096 #molecular-weight 465420 #checksum 1795.
 genetic: #gene GDB:PRKDC ##cross-references GDB:234702
 #map_position 8q11.
 PIR dates: 27-Oct-1995 #sequence_revision 27-Oct-1995 text_change
 06-Sep-1996.
 KEYWORDS DNA binding; DNA recombination; DNA repair; nucleus;
 phosphotransferase.
 SOURCE human.
 ORGANISM Homo sapiens
 Eukaryotae; mitochondrial eukaryotes; Metazoa; Chordata;
 Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
 Homo.
 REFERENCE 1 (residues 1 to 4096)
 AUTHORS Sipley,J.D., Menninger,J.C., Hartley,K.O., Ward,D.C., Jackson,S.P.
 and Anderson,C.W.
 TITLE Gene for the catalytic subunit of the human DNA-activated protein
 kinase maps to the site of the XRCC7 gene on chromosome 8
 JOURNAL Proc. Natl. Acad. Sci. U.S.A. 92 (16), 7515-7519 (1995)
 MEDLINE 95365397
 REFERENCE 2 (residues 1 to 4096)
 AUTHORS Hartley,K.O., Gell,D., Smith,G.C., Zhang,H., Divecha,N.,
 Connelly,M.A., Admon,A., Lees-Miller,S.P., Anderson,C.W. and
 Jackson,S.P.
 TITLE DNA-dependent protein kinase catalytic subunit: a relative of
 phosphatidylinositol 3-kinase and the ataxia telangiectasia gene
 product
 JOURNAL Cell 82 (5), 849-856 (1995)
 MEDLINE 95401275
 FEATURES Location/Qualifiers
 source 1..4096
 /organism="Homo sapiens"
 /db_ef="taxon:9606"
 Protein 1..4096
 /note="DNA-PK-cs"
 /product="DNA-activated protein kinase, catalytic subunit"

FIG.11A

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1 magsgagvrc sllrlqetls aadrcgaala ghqlirglgg ecvlssspav lalqtslvfs
 61 rdfglivfvr kslnsiefre creeilkflc ifleRmgqki apysveiknt ctsvytkdra
 121 akckipaldl likllqtfrs srlmdefkig elfskfygel alkkkipdtv lekvyellgl
 181 lgevhpsemi nnaenlfraf lgektqmts avrepklpv1 agclkgssl lcnftksmee
 241 dpgtsreifn fvlkairpqi dlkryavpsa girlfalhas qfstclldny vsifevlikw
 301 cahtnvelkk aalsalesfl kqvsnmvakn aemhknklqy emeqfygiir nvdsnnkels
 361 iairgyglfa gpokvinakd vdfmyveliq rckqmfltqt dtgdryrvym psflqsvasv
 421 llyldtvpev ytpvlehlvv mqidsfpqys pkmqlvccra ivkvflala kgpvlrncis
 481 tvvhqgliri cakpvpvlpkg pesesedhra sgevrtgkwk vptykdyvd1 frhllssdqm
 541 mdsiladeaf fsvnsssesl nhlydefvk svlkivekld ltleiqtvgeq engdeapgv
 601 wmiptedpaa nlhpakpkdf safinlvefc reilpekqae ffepwvysfs yelilqstrl
 661 plisgfykll sitvrnakki kyfegvspks lkhspedpek yscfafvfkf gkevavkmkq
 721 ykdelllascl tfllslphni ieldvrayvp alqmafklgl sytplaevgl naleewsiyi
 781 drhvmqpyyk dlpcldgyl ktsalsdetk nnwevsalsr aaqkgfnkvv lkhllkktkn1
 841 ssneaislee irirvvqmlg slggqinknl ltvttssdemm ksyvawdrek rlsfavpfre
 901 mkpvifldvf lprvtelalt asdrqtkvaa cellhsmvmf mlgkatqmpg gggqgappmyq
 961 lykrtfpvll rlacdvdqvt rqlyeplvmq lihwftnnhk fesqdtvsl eaildgivdp
 1021 vdstlrdfcg rcireflkws ikqitpqeqe kspvntks1 krllyslahp nafkrlgas1
 1081 afnniyrefr eeeslveqfv fealviyimes lalahadeks lgtiqccda idhlcriiek
 1141 khvslnkakk rrlprgfpps aslclldlvk wllahcgrpq tecrhksiel fykfvpllpq
 1201 nrspnwlkd vlkeegvsfl intfegggcg qpsgilagpt llylrgpfsl qatlcwldll
 1261 laalecyntf igertvgalq vlgteaqssl lkavaffles iamhdiaae kfagtgaagn
 1321 rtspqegery nyskctvvvr imefttl1n tspegwkllk kdlcnthlmr vlvqtlcepa
 1381 sigfnigdvq vmahpdcv nlmkalkmsp ykdilethlr ekitaqsiee lcavnllygpd
 1441 aqvdrsrlaa vvsackqlhr aglhn1lps qstdlhhs1vg tellslvykg iapgderqcl
 1501 psldlsckql asgllelafa fgg1cer1vs ll1npav1st aslgsssqsv ihfshgeyfy
 1561 slfsetinte llkn1ldlav1 elmqssvdnt kmvsav1ngm ldqsfreran qkhqglklat
 1621 tilqhwkkcd swwakdsple tkmavlalla kilgidssvs fntshgsfpe vfttyislla
 1681 dtkldlh1kg qavtllpfft s1tggssleel rrvleqliva hfpmqssrefp pgtprfnnyv
 1741 dcmmkf1dal elsqspmlle lmtevlcreq qhvmeelfqs sfrriarrgs cvtqvgilles
 1801 vyemfrkddp r1sftrqs1v drs1lt1wh csldalreff stivvdaidv lksrftkln1
 1861 stfdtqitkk mgyykildvm ysrlpkddvh akeskinqvf hgscitegne ltktlikcy
 1921 daftenmage nqllerrly hcaayncais viccvfnelk fyqgflfsek peknllifen
 1981 lidlkrrynf pvevevpmer kkyieirke areaangdsd gpsymss1sy ladstlseem
 2041 sqfdfstgvq sysyssqdpr patgrfrrre qrdptvhddy lelemdelnr hecmaplta1
 2101 vkhmbrslgp pqgeedsvpr dlpswmkflh gk1gn1p1v1 nirlflaklv inteevfrpy
 2161 akhw1sp1lq laasennge gihymvveiv at1lswt1gl1 tptgvpkdev lanrl1nflm
 2221 khvfhpkraw frhnleiikt lvecwkdc1s ipyrlife1kf sgkdpnskdn sv1q1llgiv
 2281 mandlppyp1d1p qcg1q1sseyf qalvn1mefv rykeyvaaaa evlgl1lryv merknilees
 2341 lcelvakqlk qhqntmedkf ivc1nkvtks fpp1adr1fmn avff1l1pkf1 gvlkt1clev
 2401 v1crvegmte lyfqlkskdf vqvmrhrder qkvcl1i1yk mmp1kpv1 re11npvvef
 2461 vshp1sttcre qmyn1lmwi1 dnyrdpeset dndsqeif1l akdvl1q1li denpg1ql1i
 2521 rnf1wshet1l pent1dr1la lnslyspkie vhfl1slatnf llem1tsmspd ypnpmfehpl
 2581 secefqeyti dsdwrfrstv ltpmfvetqa sqgt1qtrtq eg1sarwpv agqiratqqq
 2641 hdft1tq1tad grssfdw1tg sstdplvdht spssd1lfa hkrser1qra plksvgpdfg
 2701 kkr1glpgde vdnkvkgaaq rtd1l1rrr fmrdqek1s1 myarkgvaeq krekeiksel

FIG.11B



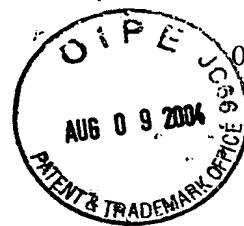
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2761 kmkqdagvvl yrsyrhgdlp diqikhssl tplsavaqrd piiakqlfss lfsgilkemd
2821 kfktlseknn itqkllqdfn rflnttsff ppfvsciqli scqhaall dpaavsagcl
2881 aslqqpvgor lleallrl paelpakrvt gkarlppdvl rwvelaklyr sigeydvrlg
2941 iftseigtkq itqsallaea rsdysesakq ydealnkqdw vdgepteak dfwelasl dc
3001 ynhlaewksl eycstasids enppdlnkiw sepfyqetyl pymirsklkl llqgeadqsl
3061 ltfidkamhg elqkailelh ysqelsllyl lqddvdaky yigniqsfm qnyssidvll
3121 hqsrltklqs vqalteiqef isfiskqgnl seqvplkrll ntwttnrypda kmdpmniwdd
3181 iitnrcffls kieekltp l ednsmnvdqd gdpsdrmevq equeedissli rsckfsmkmk
3241 midsarkqnn fslamkllke lhkesktrdd wlvswwqsysc rlshcrsrsq gcseqvltv
3301 ktvslldenn vssylxknl afrdqnilg ttyriianal ssepaclaei eedkarrile
3361 lsgsssedse kviaglyqra fqhlseavqa aseeagppsw scgpaagvid aymtladfc
3421 qqirlkeena svtdsaelqa ypalw ekml kalklinsnea rlkfprrlgi ierypeetls
3481 lmtkeissvp cwqfiswish mvalldkdqa vavqhsveei tdnypqaivy pfiissesys
3541 fkdtstghkn kefvariiksk ldqggviqdf inaldqlsnp ellfkdwnd vraelaktpv
3601 nkkniekmye rmyaalgdpk apglgafrrk fiqtfgkefd khfgkqgskl lrmkl sdfnd
3661 itnmlli kmn kdskppgnlk ecspwmsdfk veflrnelei pggydgrgkp lpeyhvriag
3721 fdervtvmas lrrpkriir ghderhpfl vkgedlrqd qrveqlfqvm ngilaqdsac
3781 sqralqlrty svvpmtssdp rappceykdw ltkmsgkhv gaymlmykga nrtetvtser
3841 kreskvpadl lkrafvrmst speaflalrs hfasshalic ishwilgigd rhlnnnfmvam
3901 etggvigidf ghafgsatqf lpvpelmpfr ltrqfinml pmketglmys imvhalafr
3961 sdpgllntm dvfvkepsfd wknfeqkmlk kggswiqtin vaeknwypqr kicyakrkla
4021 ganpavitcd elllghekap afrdyavar gskdhniraq epesqlseet qvkcimdgat
4081 dpnilgrtwe gwepwm

FIG.11C



09/296,662

REPLACEMENT SHEET

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LOCUS 130781 1014aa 01-NOV-1997
DEFINITION POLY (ADP-RIBOSE) POLYMERASE (PARP) (ADPRT)
(NAD(+))
ADP-RIBOSYLTRANSFERASE) (POLY(ADP-RIBOSE)
SYNTHETASE).
ACCESSION 130781
PID gi|30781
DBSOURCE SWISS-PROT: locus PPOL_HUMAN, accession P09874
class: standard.
created: Mar 1, 1989.
sequence updated: Dec 1, 1992.
annotation updated: Nov 1, 1997.
xrefs: gi: 510112, gi: 1017423, gi: 190166, gi: 190167, gi: 337423,
gi: 337424, gi: 178151, gi: 178152, gi: 190266, gi: 190267, gi:
178188, gi: 178190, gi: 189533, gi: 189534, gi: 35286, gi: 825702,
gi: 35288, gi: 189535, gi: 189536, gi: 88229, gi: 88227, gi:
627553, gi: 107162, gi: 107160, gi: 482956, gi: 420073, gi: 107158
xrefs (non-sequence databases): AAR;EIJUS/GHENT-2DPAGE 1620,
MIM
173870, MIM 173871, PROSITE PS00347, PROSITE PS50064
KEYWORDS TRANSFERASE; GLYCOSYLTRANSFERASE; NAD; DNA-
BINDING; NUCLEAR
PROTEIN; ADP-RIBOSYLATION; ZINC-FINGER; ZINC.
SOURCE human.
ORGANISM Homo sapiens
Eukaryotae; Metazoa; Chordata; Vertebrata; Mammalia; Eutheria;
Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (residues 1 to 1014)
AUTHORS Auer,B., Nagl,U., Herzog,H., Schneider,R. and
Schweiger,M.
TITLE Human nuclear NAD+ ADP-ribosyltransferase(polymerizing):
organization of the gene
JOURNAL DNA 8 (8), 575-580 (1989)
MEDLINE 90091744
REMARK SEQUENCE FROM N.A.
REFERENCE 2 (residues 1 to 1014)
AUTHORS Uchida,K., Morita,T., Sato,T., Ogura,T., Yamashita,R.,
Noguchi,S.,
Suzuki,H., Nyunoya,H., Miwa,M. and Sugimura,T.
TITLE Nucleotide sequence of a full-length cDNA for human fibroblast
poly(ADP-ribose) polymerase
JOURNAL Biochem. Biophys. Res. Commun. 148 (2), 617~22 (1987)
MEDLINE 88076933
REMARK SEQUENCE FROM N.A.
TISSUE=FIBROBLAST

FIG.12A



09/296,662

REPLACEMENT SHEET

17/17

1 maessdklyr veyaksgras ckkcsesipk dslrmaimvq spmfdgkvph wyhfscfwkv
61 ghsirhpde vdgselrwd dqqkvktae aggtgkgqd gigskaekl gdfaaeyaks
121 nrstckgcme kiekqvrts kkmvdpekpq lgmidrwyhp gcfvknreel gfrpeysaq
181 lkgfsllate dkealkkqlp gvksegkrkg devdgvdeva kkkskkekdk dsklekalka
241 qndliwnikd elkkvcstdn lkellifnkq qvpegesail drvadgmvg allpceecag
301 qlvfkedayy ctgdvtawtk cmvktqtpnr kewvtpkefr eisylkklkv kkqdriippe
361 tsasvaatpp psta sapaoav nssasadkpl snmkiltlgk lsrnkdevka mieklggklt
421 gtankaslci stkkevekmn kkmeevkean irvvsedflq dvsastkslq elflahilsp
481 wgaevkaepv evvaprgksg aalskkskgq vkeeginkse krmkltkgg aavdpdagle
541 hsahvlekgg kvfeatlplv divkgtnsyy klqlleddke nrywifrawg rvgtvigsnk
601 legmpskeda iehfmklyee ktgnawhakn ftkypkkfyp leidyqgdee avkkltvnpq
661 tksklpkpvq dlkmifdve smkkamveye idlqkmpolgk lskrqiqqaay silsevqqav
721 sqgssdsqil dlsnrftyli phdfgmkkpp llnnadsvqa kveildnld ievaysllrg
781 gsddsskdpi dvnyeklktd ikvvdrdsee aeirkyvkn thatthnayd levidifkie
841 regecqrykp fkqlhnrrll whgerttnfa gilaqglria ppeapvtgym fgkgiyfadn
901 vsksanycht sqgdpiglil lgevalgnmy elkhashisk lpkghsvkg lgkttpdpsa
961 nisldgvdp lgtgissqvn dtssllyneyi vydiaqvnlk yllklfnfk tslw

FIG.12B

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